AMENDMENTS TO THE CLAIMS

1. (Currently amended) An imaging system for imaging a document, comprising:

a support surface for a document to be imaged,

a light stripe projector arranged to project a plurality of diverging sheets of light that extend from the projector towards the support surface for forming a series of stripes across the document,

a camera having a detector array for capturing an image of the document and of light stripes projected onto the document, and

a processor arranged to receive from the detector array data representative of images of the document and of the light stripes and to calculate therefrom a three-dimensional profile of the document relative to a reference surface, and

wherein the relative divergence of adjacent sheets of light varies laterally across the sheets so that the stripes are concentrated where the divergence is relatively low.

2. (Previously presented) An imaging system as claimed in Claim 1, in which at least one of the sheets of light is non-planar with a variable divergence from an adjacent sheet.

3. (Previously presented) An imaging system as claimed in Claim 2, in which there is a planar sheet of light with diverging sheets either side of the planar sheet.

4. (Previously presented) An imaging system as claimed in Claim 3, in which the diverging sheets bow towards the planar sheet.

5. (Previously presented) An imaging system as claimed in Claim 4, in which the sheets of light are symmetric about a plane that is transverse to the planar sheet and which comprises a median ray of the planar sheet.

6. (Previously presented) An imaging system as claimed in Claim 1, in which the camera and light stripe projector are mounted together on a support that rises above an edge of the support surface.

7. (Previously presented) An imaging system as claimed in Claim 6, in which the light stripe projector is below the camera.

8. (Previously presented) An imaging system as claimed in Claim 1, in which the light stripes are individually indistinguishable, and the processor is adapted to identify individual stripes by determining their position within the series of stripes.

9. (Previously presented) An imaging system as claimed in Claim 1, in which the light stripes are made individually distinguishable by spatial modulation.

10. (Previously presented) A method of imaging a document using a document imaging system comprising a support surface a light stripe projector, a camera having a detector array, a processor, in which the method comprises the steps of:

i) placing the document on the support surface;

ii) using the light stripe projector to project a plurality of diverging sheets of light that extend from the projector towards the document;

iii) arranging the light stripe projector so that the sheets of light fall on the document to produce a series of light stripes on the document;

iv) using the camera to capture with the detector array an image of the document and of light stripes projected onto the document;

v) sending from the detector array to the processor data representative of the captured image of the document and of the light stripes; and

vi) using the processor to calculate therefrom a three-dimensional profile of the document relative to a reference surface;

wherein the light stripe projector projects adjacent sheets of light with a relative divergence that varies laterally across the sheets so that the stripes are concentrated on the document where the divergence is relatively low.